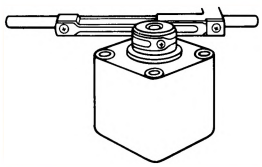
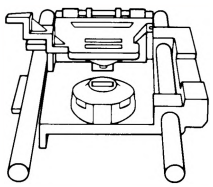
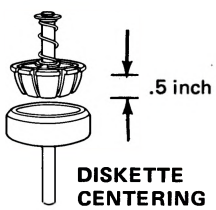
MPI Floppy Disk Drives
250K-Byte to One Megabyte



BAND POSITIONER
Virtually frictionless. Provides 5ms. access time. Extremely accurate and reliable positioning.

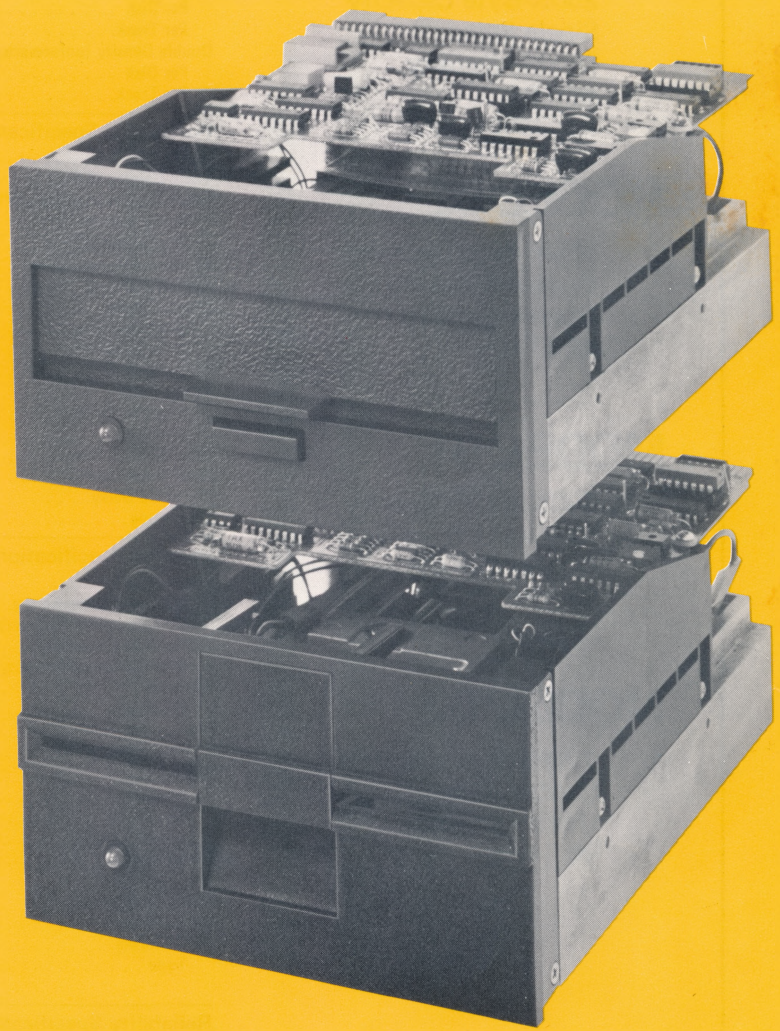


HEAD AND CARRIAGE
Head centered between two parallel rods to eliminate radial positioning errors. Bottom head fixed; top head loads.



DISKETTE CENTERING

Clutch mechanism provides most accurate diskette positioning (within .0008) and longest diskette life.



MPI's high performance mini floppy disk drive family includes single-sided double-density, and double-sided double density drives in both 48 and 96 TPI configurations. Unique features of the MPI drives are: • a patented stepper-band positioner • the industry's longest carriage • proprietary clutch and diskette ejector mechanisms • electronics packaged on a single PCB • low power consumption. Key options include a Shugart front door.

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MICRO PERIPHERALS INC.

High-Performance Mini Floppy Disk Drives

MODEL 51

250K-Byte Capacity
Single Sided
Double Density
48 TPI

MODEL 52

500K-Byte Capacity
Double Sided
Double Density
48 TPI

MODEL 91

500K-Byte Capacity
Single Sided
Double Density
96 TPI

MODEL 92

1 Megabyte Capacity
Double Sided
Double Density
96 TPI

	51	52	91	92
Capacity Specifications (In 10^3 bytes)				
Single Density (unformatted)				
Per Disk	125	250	250	500
Per Track	3.13	3.13	3.13	3.13
Double Density (unformatted)				
Per Disk	250	500	500	1000
Per Track	6.25	6.25	6.25	6.25
Functional Specifications				
Tracks	40	80	80	160
Track Density (TPI)	48	48	96	96
Recording Density (max. BPI)				
Single Density	2768	2938	2788	2961
Double Density	5536	5876	5576	5922
Rotational Speed (RPM)	300 ±1½%			
Average Latency	100ms			
Transfer Rate				
Single Density	125K bits/sec			
Double Density	250K bits/sec			
Encoding Method	FM, MFM, M^2FM			
Access Time				
Track to Track	5ms			
Average	84ms (51/52)		150ms (91/92)	
Head Settling Time	15ms			
Head Load Time	35ms			
Power-Up Delay	0.5sec			
Interfacing	Industry/ANSI compatible			
Physical Specifications				
Environmental				
Operating Temperature	40°F to 115°F (4.4°C to 46.1°C)			
Non-Operating Temperature	-40°F to 160°F (-40°C to 71°C)			
Operating Humidity	20% to 80% (non-condensing)			
Non-Operating Humidity	5% to 95% (non-condensing)			
Electrical				
DC Power	+12V±5%, 0.8 Amp (1.5 Amp surge) +5V±5%, 0.4 Amp			
Power Dissipation	12W operation; 6W standby			
Mechanical				
Height	3.25 in. (82.6 mm)			
Width	5.75 in. (146.1 mm)			
Length	7.75 in. (196.9 mm)			
Weight	3.0 lbs. (1.36kg) for 51/52 3.1 lbs. (1.41kg) for 91/92			
Media Requirements				
Diskette	Industry Compatible, 5¼ in.			
Sectoring	Soft; 10, 16			
Type	Single or Double Sided Single or Double Density			
Reliability Specifications				
MTBF	9,200 hours			
MTTR	0.5 hours			
Design Life	5 years			
Media Life	$3x10^6$ passes/track			
Data Integrity				
Soft Errors	1 per 10^9 bits read			
Hard Errors	1 per 10^{12} bits read			
Seek Errors	1 per 10^6 seeks			

UL And CSA Approved

Options

Door Lock
Shugart Front Door (Add –S)
Detailed design data available on request.